

# DC12-230 (12V230Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	230Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 67.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 3 mΩ
Terminal	F10(M8)
Max. Discharge Current	2300A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	69.0 A
Reference Capacity	C3 169.2AH C5 192.5AH C10 219.0AH C20 230.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ± 5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, V, telecom, broadband and cable TV, UPS systems etc.



ISO 9001



ISO 14001



OHSAS 18001

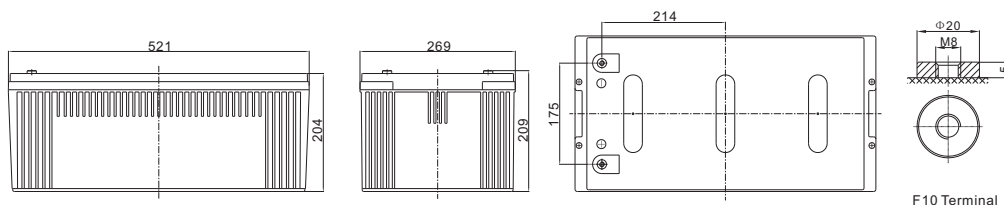


MH 28539



G4M20206-0910-E-16

## Dimensions



Length	521±2mm (20.5 inches)
Width	269±2mm (10.6 inches)
Height	204±2mm (8.03 inches)
Total Height	209±2mm (8.23 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F10 Terminal

Unit: mm

### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	456.2	359.6	208.4	130.9	80.8	60.2	48.1	40.6	27.7	23.5	12.0
1.65V	441.0	348.8	204.1	128.4	79.4	59.3	47.5	40.1	27.4	23.2	11.8
1.70V	421.1	334.7	198.3	125.1	77.6	58.1	46.6	39.4	27.0	22.9	11.7
1.75V	394.6	315.7	190.4	120.7	75.1	56.4	45.4	38.5	26.4	22.5	11.5
1.80V	359.1	290.1	179.6	114.5	71.7	54.1	43.7	37.2	25.6	21.9	11.2
1.85V	310.6	254.9	164.3	105.7	66.7	50.7	41.2	35.3	24.4	21.0	10.8

### Constant Power Discharge Characteristics : WPC(25°C)

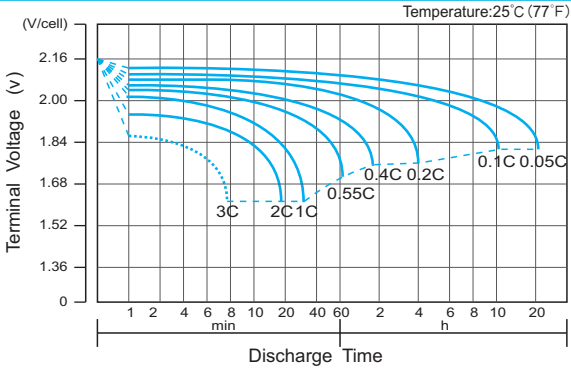
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	816	662	399	258	161	121	97.3	82.3	56.9	48.5	24.8
1.65V	810	655	396	255	160	120	96.4	81.7	56.4	48.1	24.6
1.70V	782	634	387	250	156	118	94.8	80.5	55.7	47.5	24.3
1.75V	746	607	375	242	152	115	92.7	78.9	54.6	46.7	23.9
1.80V	691	566	358	231	146	111	89.6	76.5	53.1	45.5	23.4
1.85V	608	504	331	215	137	104	84.9	72.9	50.8	43.7	22.5

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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## Discharge Characteristics Curve



## Charge Characteristic Curve for Cycle Use(IU)



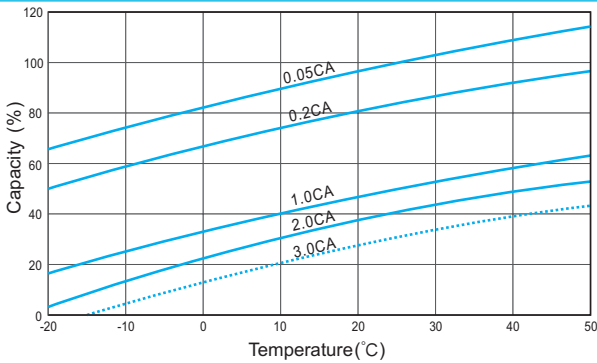
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



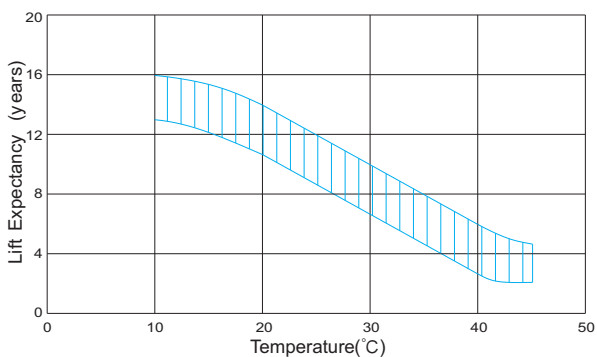
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



## Relationship of OCV And State of Charge(20°C)



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.